Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the present application:

1.   (Currently Amended) A method of managing Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) having a broadband access server (BRAS) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG), comprising:

receiving at the RAN, a service session request from the NSP and/or the ASP including a request to establish or terminate a communication session, the NSP and/or ASP being associated with a service provider record;

authenticating the NSP and/or the ASP based on information contained in the service provider record to provide an authentication result or a termination result; and

transmitting from the RAN, the authentication result or the termination result to the NSP and/or ASP,

wherein the RAN comprises a digital subscriber link (DSL) network;

wherein the DSL network further includes a Network Interface Protocol Handler, a DSL Service Manager, and a DSL Session Data Store; and

wherein receiving a service session request from the NSP and/or the ASP comprises receiving the service session request at the Network Interface Protocol Handler.

2.   (Cancelled).

3.   (Currently Amended) The method of Claim [[2]] 1, wherein the service session request comprises an establish service session request and wherein authenticating further comprises:

forwarding from the Protocol Handler, the establish service session request to the to the DSL service manager;

querying from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

validating at the DSL service manager, service provider credentials in the obtained service provider record; and

generating the authentication result responsive to the validation of the service provider credentials.

4.   (Original) The method of Claim 3 wherein transmitting the authentication result further comprises:

transmitting from the Protocol Handler, a valid authorization code to the NSP and/or the ASP if the service provider credentials are validated at the DSL service manager; and

transmitting from the Protocol Handler, an invalid authorization code to the NSP and/or the ASP if the service provider credentials are not validated at the DSL service manager.

5.   (Original) The method of Claim 4 wherein the authentication result is included in a establish service session response from the RAN to the NSP and/or the ASP and wherein the establish service session response is transmitted from the Protocol Handler to the NSP and/or the ASP.

6.   (Currently Amended) The method of Claim [[2]] 1, wherein the service session request comprises a terminate service session request and wherein authenticating further comprises:

forwarding from the Protocol Handler, the terminate service session request to the to the DSL service manager;

querying from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

validating at the DSL service manager, an authorization code in the obtained service provider record;

terminating the communication session associated with the authorization code if the authorization code is validated; and

generating the termination result responsive to the validation of the authorization code.

7.   (Original) The method of Claim 6, further comprising releasing session resources associated with the terminated communication session.

8.   (Original) The method of Claim 6 wherein transmitting the termination result comprises transmitting a terminate service session response from the Protocol Handler to the NSP and/or the ASP.

9.   (Original) The method of Claim 1 wherein the service provider record comprises a service provider record maintained at the NSP that identifies the NSP, a service provider record maintained at the ASP that identifies the ASP and/or corresponding service provider records maintained at the RAN that identify the NSP and/or the ASP.

10.   (Currently Amended) A system for managing Quality of Service (QoS) and/or bandwidth allocation, comprising:
        a Regional/Access Network (RAN) having a broadband access server (BRAS) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG), the RAN being configured to receive a service session request from the NSP and/or the ASP including a request to establish or terminate a communication session, the NSP and/or ASP being associated with a service provider record, to authenticate the NSP and/or the ASP based on information contained in the service provider record to provide an authentication result or a termination result, and to transmit the authentication result or the termination result to the NSP and/or ASP,
        wherein the RAN comprises a digital subscriber link (DSL) network;
        wherein the DSL network further includes an Network Interface Protocol Handler, a DSL Service Manager, and a DSL Session Data Store; and
        wherein the Protocol Handler is configured to receive the service session request from the NSP and/or the ASP.

11.   (Cancelled).

12.   (Currently Amended) The system of Claim [[11]] 10, wherein the service session request comprises an establish service session request, wherein the Protocol Handler is further configured to forward the establish service session request to the to the DSL service manager, wherein the DSL service manager is configured to query the DSL Session Data Store to obtain a service provider record based on a service provider identifier, validate service provider credentials in the obtained service provider record, and generate the authentication result responsive to the validation of the service provider credentials.

13.   (Original) The system of Claim 12, wherein the Protocol Handler is further configured to transmit a valid authorization code to the NSP and/or the ASP if the service provider credentials are validated and transmit an invalid authorization code to the NSP and/or the ASP if the service provider credentials are not validated.

14.   (Original) The system of Claim 13 wherein the authentication result is included in a establish service session response from the RAN to the NSP and/or the ASP and wherein the Protocol handler is further configured to transmit the establish service session response to the NSP and/or the ASP.

15.   (Currently Amended) The system of Claim [[11]] 10, wherein the service session request comprises a terminate service session request, wherein the Protocol Handler is further configured to forward the terminate service session request to the to the DSL service manager, wherein the DSL service manager is configured to query the DSL Session Data Store to obtain the service provider record based on a service provider identifier, wherein the DSL service manager is configured to validate an authorization code in the obtained service provider record, terminate the communication session associated with the authorization code if the authorization code is validated and generate the termination result responsive to the validation of the authorization code.

16.   (Original) The system of Claim 15, wherein the DSL service manager is further configured to release session resources associated with the terminated communication session.

17.   (Original) The system of Claim 16 wherein the Protocol handler is further configured to transmit a terminate service session response to the NSP and/or the ASP.

18.   (Currently Amended) A system for managing Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) having a broadband access server (BRAS) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG), comprising:

> means for receiving at the RAN, a service session request from the NSP and/or the ASP including a request to establish or terminate a communication session, the NSP and/or ASP being associated with a service provider record;

> means for authenticating the NSP and/or the ASP based information contained in the service provider record to provide an authentication result or a termination result; and

> means for transmitting from the RAN the authentication result or the termination result to the NSP and/or ASP,

> wherein the RAN comprises a digital subscriber link (DSL) network;

> wherein the DSL network further includes an Network Interface Protocol Handler, a DSL Service Manager, and a DSL Session Data Store; and

> wherein the means for receiving at the RAN, a service session request from the NSP and/or the ASP comprises means for receiving at the Protocol Handler the service session request.

19.   (Cancelled).

20.   (Currently Amended) The system of Claim [[19]] 18, wherein the service session request comprises an establish service session request and wherein the means for authenticating further comprises:

> means for forwarding from the Protocol Handler, the establish service session request to the to the DSL service manager;

> means for querying from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

means for validating at the DSL service manager, service provider credentials in the obtained service provider record; and

means for generating the authentication result responsive to the validation of the service provider credentials.

21.   (Original) The system of Claim 20 wherein the means for transmitting the authentication result further comprises:

means for transmitting from the Protocol Handler, a valid authorization code to the NSP and/or the ASP if the service provider credentials are validated at the DSL service manager; and

means for transmitting from the Protocol Handler, an invalid authorization code to the NSP and/or the ASP if the service provider credentials are not validated at the DSL service manager.

22.   (Original) The system of Claim 21 wherein the authentication result is included in a establish service session response from the RAN to the NSP and/or the ASP and wherein the establish service session response is transmitted from the Protocol Handler to the NSP and/or the ASP.

23.   (Currently Amended) The system of Claim [[19]] 18 wherein the service session request comprises a terminate service session request and wherein the means for authenticating further comprises:

means for forwarding from the Protocol Handler, the terminate service session request to the to the DSL service manager;

means for querying from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

means for validating at the DSL service manager, an authorization code in the obtained service provider record;

means for terminating the communication session associated with the authorization code if the authorization code is validated; and

means for generating the termination result responsive to the validation of the authorization code.

24.   (Original) The system of Claim 23, further comprising means for releasing session resources associated with the terminated communication session.

25.   (Original) The system of Claim 24 wherein the means for transmitting the termination result comprises transmitting a terminate service session response from the Protocol Handler to the NSP and/or the ASP.

26.   (Currently Amended) A computer program product for managing Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) having a broadband access server (BRAS) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG), comprising:

a computer readable storage medium having computer readable program code embodied in the medium, the computer readable program code comprising:

computer readable program code that receives at the RAN, a service session request from the NSP and/or the ASP including a request to establish or terminate a communication session, the NSP and/or ASP being associated with a service provider record;

computer readable program code that authenticates the NSP and/or the ASP based information contained in the service provider record to provide an authentication result or a termination result; and

computer readable program code that transmits from the RAN the authentication result or the termination result to the NSP and/or ASP,

wherein the RAN comprises a digital subscriber link (DSL) network;

wherein the DSL network further includes an Network Interface Protocol Handler, a DSL Service Manager, and a DSL Session Data Store; and

wherein the computer readable program code that receives at the RAN, a establish service session request from the NSP and/or the ASP comprises computer readable program code that receives at the Protocol Handler the service session request.

27.   (Cancelled).

28.   (Currently Amended) The computer program product of Claim [[27]] 26, wherein the service session request comprises an establish service session request and wherein the computer readable program code that authenticates further comprises:

computer readable program code that forwards from the Protocol Handler, the establish service session request to the to the DSL service manager;

computer readable program code that queries from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

computer readable program code that validates at the DSL service manager, service provider credentials in the obtained service provider record; and

computer readable program code that generates the authentication result responsive to the validation of the service provider credentials.

29.   (Original) The computer program product of Claim 28 wherein the computer readable program code that transmits the authentication result further comprises:

computer readable program code that transmits from the Protocol Handler, a valid authorization code to the NSP and/or the ASP if the service provider credentials are validated at the DSL service manager; and

computer readable program code that transmits from the Protocol Handler, an invalid authorization code to the NSP and/or the ASP if the service provider credentials are not validated at the DSL service manager.

30.   (Original) The computer program product of Claim 29 wherein the authentication result is included in a establish service session response from the RAN to the NSP and/or the ASP and wherein the computer readable program code that transmits the establish service session response comprises computer readable program code that transmits the establish service session response from the Protocol Handler to the NSP and/or the ASP.

31.   (Currently Amended) The computer program product of Claim [[27]] 26, wherein the service session request comprises a terminate service session request and wherein the computer readable program code that authenticates further comprises:

computer readable program code that forwards from the Protocol Handler, the terminate service session request to the to the DSL service manager;

computer readable program code that queries from the DSL service manager, the DSL Session Data Store to obtain the service provider record based on a service provider identifier;

computer readable program code that validates at the DSL service manager, an authorization code in the obtained service provider record;

computer readable program code that terminates the communication session associated with the authorization code if the authorization code is validated; and

computer readable program code that generates the termination result responsive to the validation of the authorization code.

32.   (Original) The computer program product of Claim 31 further comprising computer readable program code that releases session resources associated with the terminated communication session.

33.   (Original) The computer program product of Claim 32 wherein the computer readable program code that transmits the termination result comprises computer readable program code that transmits a terminate service session response from the Protocol Handler to the NSP and/or the ASP.